43. A Method for producing a display based experience for a user comprising the steps of;

Providing a computer

Providing a large screen TV display of size greater than 42 inches diagonal, the display being controlled by said computer

Providing at least one electro-optical sensor having an output

Processing in said computer said sensor output

From said processing, determining the position or orientation of a portion of a person and/or object camera, and using said computer,

Modifying said display to create a response to an action of said person.

44. A method according to claim 44 wherein said display is approximately lifesize.

45. A method according to claim 44 wherein said user touches or points at virtual objects depicted on said display

46. A method according to claim 44 wherein said user pinches, or grips virtual objects depicted on said display

47. A method according to claim 44 wherein said display varies as the users view changes

48. Method for activity involving an object, comprising the steps of

49. Providing an object

50. Determining if features can be sensed by a tv camera

51. Affixing special datums to said object where features are required for best sensing results,

52. Recording the locations of features and special datums into a data base.

53. A method according to claim 48 wherein said special datum is easily affixed by hand

54. A method according to claim 48 wherein said special datum is retroreflective

55. A method according to claim 48 wherein said special datum is linear

56. A method according to claim 48 wherein said special datum is curvilinear

57. A method of providing a game or other human activity comprising

Providing an object

Providing a member attached to said object and movable with respect thereto

Determining the position or orientation, or change therein, of said member with an electro-optical sensing system

From said determined position or orientation, or change therein, determining an input parameter to a computer program, and

Using said program, provide said game or other activity

58. A method according to claim 57 wherein said member is movable by said human

59. A method according to claim 57 wherein said member moves as a result of the action of a physical variable

60. A method according to claim 57 including the additional step of determining the position or orientation of a portion of said human

61. A method according to claim 57 Wherein said sensor is comprised of at least one TV camera

62. A method according to claim 57, wherein said position or motion is determined relative to another member or said object

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